

AD-HOC SERVICE DISCOVERY PROTOCOL

Abstract

An ad-hoc discovery protocol improves reliability, security and scalability of multicast and server-based discovery. In switching from multicast to server-based
5 discovery, the discovery client is made responsible for multicast suppression, and not discoverable devices with services. Messages include message identifier and time-to-live parameters to detect recast queries and avoid duplicating replies. A device's announcement message includes endpoint identifier, configuration number and stateless
boot time parameters to detect changed device configuration and rebooted state for
10 refreshing cached device and service descriptions. Paging parameters allow a discovery client to control the number of discovery responses returned at a time from a discovery server.